

Abstract

In a special melting unit, in particular a pressure induction furnace having a copper ingot mold (6) and water cooling, in which the cooling water is circulated in a closed pressurized water circuit around the cooling crucible (2) surrounding the ingot mold, a device is provided for equalizing the pressures in the melting chamber (35) and in the cooling crucible (2), comprising a piston-type accumulator (19) which is subdividable by a piston (16) into two variable-volume chambers (17, 18), the one chamber (17) corresponding with the cooling water circuit and the other chamber (18) being connected to a vessel (30) which is approximately half filled with a hydraulic liquid, the other half of the vessel being connected via a pipe (32) to the furnace hood (3) which is under gas pressure.

(Single) Figure 1